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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/694,723

10/29/2003

Jeffrey Allen

PA1425

4035

28390 7590 01/26/2007
MEDTRONIC VASCULAR, INC.
IP LEGAL DEPARTMENT
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EXAMINER

HOUSTON, ELIZABETH

ART UNIT

PAPER NUMBER

3731

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
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3 MONTHS

01/26/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/694,723

Applicant(s)

ALLEN ET AL.

Examiner

Elizabeth Houston

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 November 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 November 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Specification

1. The amendment filed 11/09/06 is objected to under 35 U.S.C. 132(a) because it introduces new matter into the disclosure. 35 U.S.C. 132(a) states that no amendment shall introduce new matter into the disclosure of the invention. The added material which is not supported by the original disclosure is as follows: amendment to paragraph [0042] which states, "or the first valley turn 124 may extend further in the longitudinal direction than the second valley turn 148, depending on the length of the midsized segment". If the first valley turn extend further longitudinally than the second valley turn, the result would be midsized segment (118) being longer than long segment (104) and therefore (118) would no longer be the midsized segment and (104) would no longer be the long segment. There is no support in the specification for this amendment.

Applicant is required to cancel the new matter in the reply to this Office Action.

Drawings

1. The drawings were received on 11/09/06. These drawings are acceptable.

Claim Rejections - 35 USC § 112

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

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2. Claims 19-22 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. There is no disclosure in the written specification or the drawings that depicts or explains how the “long segment of a first element *overlaps* the short segments of a second adjacent element”. None of the drawings depict any embodiments with this feature. The specification at Paragraph [0048] states that it is favorable to keep the peaks and valleys generally abutting one another and that it is unfavorable to have the segments overlap. The specification at Paragraph [0060] states that the first peak turn and the second valley turn overlap. However, there is no disclosure that any of the *segments* overlap.

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 19-22 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. It is unclear how the “long segments” of a first element *overlap* the “short segments” of a second adjacent element” when it is clear from the disclosure that the favorable embodiment is when the peaks and turns abut one another (Paragraph [0048]).

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 1-7, 9-13, 16-22 rejected under 35 U.S.C. 102(e) as being anticipated by Lowe et al. (US 2004/0093073).

6. Lowe discloses a stent in Figures 23 and 24. The figure is copied and labeled below to depict the long segment (L), first peak (1P) being defined by a single turn radius, connecting with a midsize segment (M), connecting with a first valley turn (1V), connecting with a short segment (S), connecting with a second peak turn (2P), connecting with a second midsize segment (M), and connecting with a second valley turn (2V), connecting with a long segment of the adjacent series. It should be clear that the first peak turn of one element is connected to the first valley turn of an adjacent element. Each element has a first connection point connecting a first peak of the first element to a first valley of an adjacent second element and a second connection point connecting a second peak of the first element to a second valley of the second element. The connection points form a double helix pattern. The elements are formed connected, welded or from toroidal rings (Para [0095]). The stent is balloon expandable (Para [31]). Regarding claim 19, the connecting member (64, Fig. 12) spans between one of the

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long segment of the first element and one of the long segments of the second element in both a longitudinal and radial direction. Note that the claim does not require that the connecting member extend directly from the long segment but rather in the broadest interpretation, merely requires that the spans in a radial direction somewhere between the two segments.

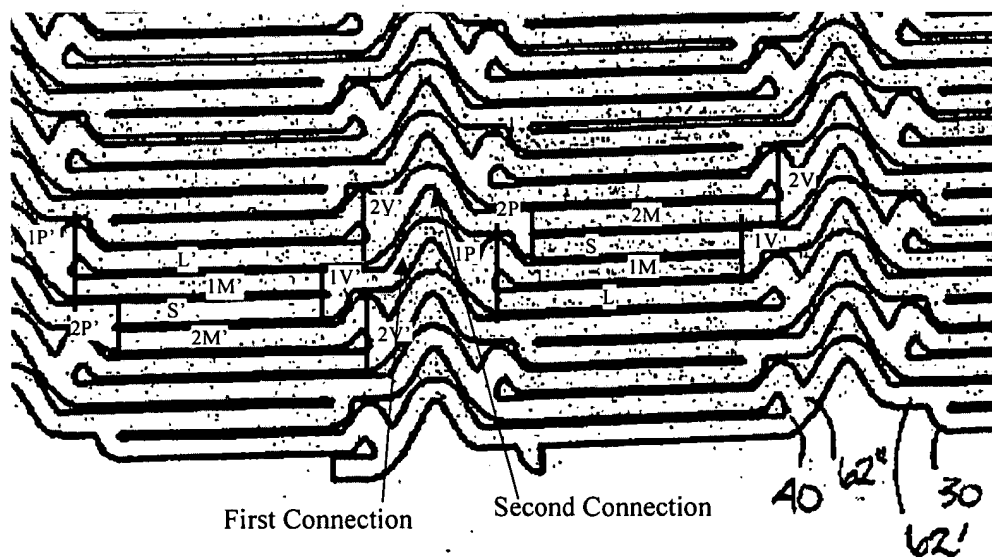
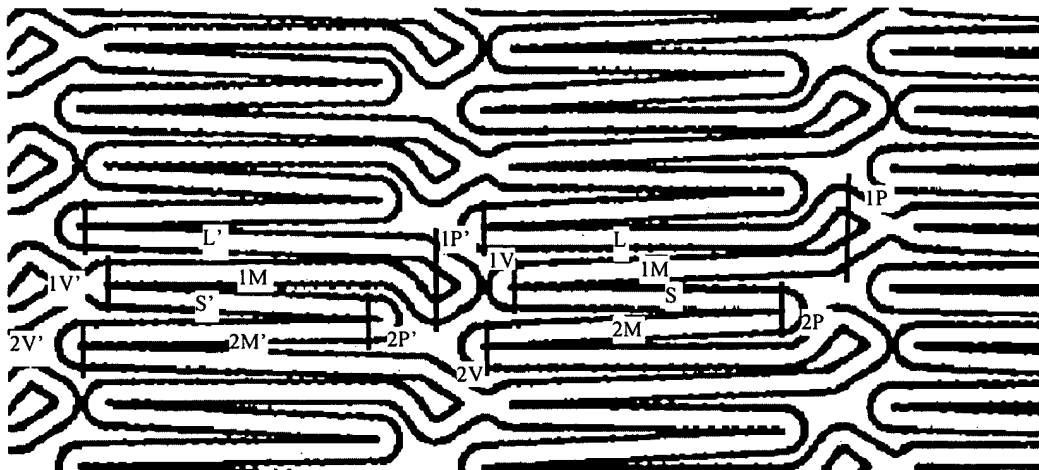


FIG. 12a

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 8, 14 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lowe in view of Orth et al. (USPN 5,591,197).

9. Lowe discloses all the limitations of the instant invention substantially as claimed except for the first valley turn and the second peak turn has a larger turn radius than the first peak turn and the second valley turn.

10. Orth discloses a stent with different radii at different turns of the stent to accommodate differing expansion rates of the various members and to provide more uniform expansion.

11. It would have been obvious to one having ordinary skill in the art at the time of the invention to incorporate turns with varying radii in order to enhance the function of the stent and provide the advantages as disclosed by Orth. The inventions are analogous with each other and the instant invention and therefore the combination is proper.

Response to Arguments

3. Applicant's arguments filed 11/09/06 have been fully considered but they are not persuasive. Regarding applicant's argument as to the Lowe reference, examiner asserts that the rejection above clearly explains how the Lowe reference does still in fact anticipate the claims of the instant invention.

4. Regarding applicant's argument that there is no motivation to replace the foot extensions of Lowe with the turns of Orth. Examiner is not relying on Orth to replace the foot extensions. Examiner is relying on Orth to teach that it is a known advantage to vary the turning radius at different turns along the stent since it provides a more uniform expansion. This combination would not necessarily replace the foot extensions with a single radius turn, but rather, would replace the single radius turns with larger radius turns.

Conclusion

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the

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shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Elizabeth Houston whose telephone number is 571-272-7134. The examiner can normally be reached on M-F 9:00-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Anhtuan Nguyen can be reached on 571-272-4963. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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ANH TUAN T. NGUYEN
SUPERVISORY PATENT EXAMINER


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